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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/914,209

01/15/2002

Osamu Takada

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EXAMINER

AVELLINO, JOSEPH E

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,209

Applicant(s)

TAKADA ET AL.

Examiner

Joseph E. Avellino

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6 and 8-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 8-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: IDS 8/15/05.

DETAILED ACTION

1. Claims 1, 2, 5, 6, and 8-28 are presented for examination. The Office acknowledges the addition of claims 18-28.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picher-Dempsey (U.S. 6,779,031 B1) (hereinafter Picher) in view of Choudhury et al. (USPN 5.933.412) (hereinafter Choudhury)

1. Regarding claim 1,

Picher taught a network system connected with a plurality of network domains, each of said domains configured of a communication node that enables to transfer an IP packet and process data, a network management system, a control server, and a plurality of end systems, characterized in that:

said end system located in any one of said network domains operates to transmit to said communication node a communication request in which the communication quality is guaranteed to another network domain (**from column 1 line 66 to column 2 line 1; and column 2 lines 63 –65**), said communication node having received said communication request operates to request a request for setting a communication path

Art Unit: 2143

between said network domains to said network management system (**column 2 lines 1-4 and 65-66**), said network management system operates to determine if a network resource exists in said another network domain corresponding to the request for setting the communication path (**column 2 lines 4-8**), if yes, arbitrate said local network with said another network domain, and set the communication path in which the communication quality is guaranteed over both of said network domains (**from column 2 line 66 to column 3 line 6**).

Picher does not specifically teach the request for setting a QoS guaranteed path is broken up and converted into a set of requests for resource reservation and determine if the network resource element can be reserved on the basis of the qualification information of a request source having issued said reserving request and network resource allocating information. In analogous art, Choudhury discloses another resource request system which discloses the resource request (i.e. setup connections request from End Host A) (Figure 3) is broken up into a plural resource reservation requests for resource allocation (i.e. all switches are set up and reserved in parallel) and the request processing is performed by the control server (i.e. connection server) through the control network (i.e. the domain which controls the switches) (Figures 3 and 8; col. 7, lines 40-60). It would have been obvious to one of ordinary skill in the art to combine the teaching of Choudhury with Picher in order to allow an alternative to existing switch-by-switch sequential connection setup approaches, which reduces computer processing and latency between requesting a path and setting up the path.

Art Unit: 2143

2. Regarding claim 2,

Picher taught a system wherein said network management system having received the communication request in which the communication quality is guaranteed to said another network domain by said communication node **(from column 1 line 66 to column 2 line 1 and column 2 lines 63 –65)** operates to determine if a network resource exists in said another network domain in response to said communication request **(column 2 lines 4-8)**, based on the qualification information of a request source having issued said communication request and a network resource allocating policy **(column 4 lines 3-10 and 39-45)**.

3. Referring to claim 8, Picher discloses the invention as described above, however does not specifically disclose the control network is separated from a network configured by a mutual connection of communication nodes. In analogous art, Choudhury discloses that the control network (i.e. ATM logical signaling links connecting the end hosts with connection servers) is separated from a network configured by a mutual connection of communication nodes (i.e. switches) due to the communication path between said network domains (i.e. the connection between the switches) (Figure 2). It would have been obvious to one of ordinary skill in the art to combine the teaching of Choudhury with Picher in order to allow an alternative to existing switch-by-switch sequential connection setup approaches, which reduces computer processing and latency between requesting a path and setting up the path.

Art Unit: 2143

4. Claims 9 and 10 are rejected for similar reasons as stated above.

3. Claims **3, 6, and 11-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Picher-Dempsey (U.S. **6,779,031 B1**), hereinafter 'Picher' in view of Braden et al. (RFC 2205, IETF Network Working Group, September, 1997, "Resource ReSerVation Protocol (RSVP)") hereinafter 'Braden'.

4. Regarding claims **5 and 12**,

Picher taught a system wherein the determination as to whether or not said reservation is enabled is carried out by determining if a requested bandwidth can be secured in a required timing as to one line leading from the requested communication node to the next communication node on the communication path (**from column 1 line 66 to column 2 line 8 and column 4 lines 5-10 and 39-65**). Braden also taught reserving network resources, only if the requirement resources can be satisfied request (**pages 4-5, page 20 paragraph 4 and page 22 paragraph 1**). Note that a starting and ending time are inherent in a session request.

5. Regarding claims **6 and 11**,

Picher taught a system wherein, the request for reservedly setting a communication path in which the communication quality is guaranteed and the other request for promptly setting said communication path (**Braden: pages 4-5 and Picher: column 1 66 to column 2 line 8**). Note that none of the references provide any teaching regarding delaying the reservation of the resources, implying that the determination of

Art Unit: 2143

availability of resources is followed by the consequent reservation, which is done immediately. In deed reserving means keeping back or secure for oneself as for future use or special purpose, therefore it is more desirable to reserve the resources upon receiving the request, in order to facilitate keeping the resources unavailable for future requests. Picher taught session definitions in **column 4 line 39**.

5. Claims 13-28 are rejected for similar reasons as stated above.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 5, 6, and 8-28 have been considered but are moot in view of the new ground(s) of rejection.

7. In the remarks, Applicant argues, in substance, that (1) neither Picher, nor Choudhury disclose the inter-organization arbitrating means negotiates with another arbitrating means provided in another control server withint the other network domain to obtain a network resource corresponding to the request for network resource.

8. As to point (1) Applicant is incorrect, Picher discloses a reservation request from one router (i.e. the first inter-organization arbitrating means) to another router (i.e. the other inter-organization arbitrating means) (col. 2, lines 4-10). The network resource which is being requested is bandwidth reservation request through the router. One of ordinary skill in the art would understand that the various LANs (110, 130, and 140) can

Art Unit: 2143

correspond to the different domains of Choudhury, as it is well known that various domains are separated by routers, switches, etc. By this rationale, the rejection is maintained.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

Art Unit: 2143

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEA
April 17, 2006



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TECHNOLOGY CENTER 2100